Attorney Docket No.: 01CON346P Serial No.: 09/761,033

List of Claims:

Claims 1-27 (cancelled)

Claim 28 (currently amended): A method of encoding a speech signal, said method

comprising:

processing said speech signal to generate a plurality of frames, wherein each of said

plurality frames includes a plurality of subframes;

coding a previous subframe of said plurality of subframes using Code-Excited Linear

Prediction to generate a previous excitation signal; and

applying short term enhancement using said previous excitation signal to enhance a

current excitation signal for a current subframe;

wherein pitch lag and gain from said previous subframe are scaled and added to said

current subframe to enhance an amount of data used to describe said current excitation signal.

Claim 29 (previously presented): The method of claim 28, wherein said short term

enhancement is achieved by using a main pulse from said previous subframe to generate one or

more short term enhancement pulses based on short term correlation between said previous

subframe and said current subframe.

Claim 30 (previously presented): The method of claim 28, wherein said main pulse is

generated by said coding said previous subframe.

Claim 31 (previously presented): The method of claim 28, wherein said short term

enhancement is achieved by weighting said previous excitation signal by a current weighting

filter to estimate correlation peaks at a distance within said current subframe.

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Claim 32 (currently amended): The method of claim 31, wherein said short term enhancement determines around less than five peaks and gains per each sub-frame from said previous excitation signal.

Claim 33 (previously presented): The method of claim 31, wherein said current excitation signal is constructed using $P(n) = C \sum_{i} Gi \cdot \delta(n-Ti) + \delta(n)$, where Gi is a gain, Ti is a distance for an ith peak, and C is a coefficient.

Claim 34 (previously presented): The method of claim 33, wherein gains and distances are calculated by maximizing correlations of previous excitation signals in a weighted speech domain.

Claim 35 (previously presented): The method of claim 33, wherein short term enhancement pulses are generated by performing a convolution operation of P(n) with said previous excitation signal.

Claims 36-37 (cancelled)

Claim 38 (currently amended): An encoder for encoding a speech signal, said encoder comprising:

a speech processing circuitry configured to process said speech signal to generate a plurality of frames, wherein each of said plurality frames includes a plurality of subframes;

a coding circuitry configured to code a previous subframe of said plurality of subframes using Code-Excited Linear Prediction to generate a previous excitation signal; and

a short term enhancement circuitry configured to apply short term enhancement using said previous excitation signal to enhance a current excitation signal for a current subframe;

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wherein pitch lag and gain from said previous subframe are scaled and added to said current subframe to enhance an amount of data used to describe said current excitation signal.

Claim 39 (previously presented): The encoder of claim 38, wherein said short term enhancement is achieved by using a main pulse from said previous subframe to generate one or more short term enhancement pulses based on short term correlation between said previous subframe and said current subframe.

Claim 40 (previously presented): The encoder of claim 38, wherein said main pulse is generated by said coding said previous subframe.

Claim 41 (previously presented): The encoder of claim 38, wherein said short term enhancement is achieved by weighting said previous excitation signal by a current weighting filter to estimate correlation peaks at a distance within said current subframe.

Claim 42 (currently amended): The encoder of claim 41, wherein said short term enhancement determines around less than five peaks and gains per each sub-frame from said previous excitation signal.

Claim 43 (previously presented): The encoder of claim 41, wherein said current excitation signal is constructed using $P(n) = C \sum_{i} Gi \cdot \delta(n-Ti) + \delta(n)$, where Gi is a gain, Ti is a distance for an ith peak, and C is a coefficient.

Claim 44 (previously presented): The encoder of claim 43, wherein gains and distances are calculated by maximizing correlations of previous excitation signals in a weighted speech domain.

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Claim 45 (previously presented): The encoder of claim 43, wherein short term

enhancement pulses are generated by performing a convolution operation of P(n) with said

previous excitation signal.

Claims 46-47 (cancelled)